

REMARKS

In response to the Office Action dated July 28, 2003, claim 14 is amended. Claims 14-19 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claim 14 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In support of this position, the Examiner identifies a phrase that is confusing. By this response, each of the noted point of indefiniteness has been appropriately addressed and confusing and/or vague language deleted in favor of language believed to recite the invention with the degree of precision and particularity required by the statute. Therefore, it is respectfully urged that the rejection be withdrawn.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

I. Claims 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nomura et al. (USPN 6,261,385).

The rejection is respectfully traversed.

Anticipation, under 35 U.S.C. § 102, requires that each element/stpe of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).

The Examiner admits that Nomura et al. does not disclose the process steps recited in claim 14. Essential features of the invention recited in claim 14 include the following steps:

(1) Preparing (step) the crystalline mother material having a content of amorphous of 95% or less.

(2) Repeating (step) a continuous process composed of the amorphising process and crystallizing process, one or more times.

The failure of Nomura et al. to disclose the above noted steps undermines the factual determination that Nomura et al. identically describes the claimed inventions within the meaning of 35 U.S.C. § 102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claim 14 under 35 U.S.C. § 102 for lack of novelty as evidenced by Nomura et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

II. Claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nomura et al.

The rejection is respectfully traversed.

Even though the Examiner admits that Nomura et al. does not disclose the above noted steps (1) and (2), he contends that one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product.

In accessing infringement, the scope of a product by process claim is limited by the process stated, *Atlantic Thermoplastic Company Inc. v. the Faytex Corp.*, 23 USPQ

2d 1481 (Fed. Cir. 1992) rehearing denied, 24 USPQ2d 1138, citing the Supreme Court decision in *Cochrane v. Badische Anilin & Soda Fabrik*, 111 U.S. 293 (1884).

In the Response to Arguments portion of the Official Action, the Examiner states that the sections of the specification cited by Applicants in their arguments are not data in support of Applicants' position, but rather, are merely unsubstantiated statements.

In response to this assertion by the Examiner, the Assignee did comparative experiments, which produce an exchange spring magnet, of the present invention and the arrangement disclosed in Nomura et al. Enclosed herewith are the experimental results showing the significant effects of the present invention in comparison with Nomura et al.

The enclosed Fig. 1 shows the exchange spring magnet produced by using the method disclosed in Nomura et al. The experiment procedure is that after the alloy powder obtained by pulverizing quenched thin ribbons of a starting alloy having a chemical composition corresponding to the formula $\text{Nd}_9\text{Fe}_{86}\text{B}_5$ is heated at 900°C , the powder is compressively deformed in one direction (columns 9-10; Example 3). As shown in the enclosed Fig. 1, the exchange spring magnet produced by this method has a crystal particle diameter of about 150nm.

On the other hand, the enclosed Fig. 2 shows the exchange spring magnet produced by using the method of the present invention. In this experiment, a crystalline mother material containing amorphous parts was produced according to a liquid quenching method using an alloy of the formula $\text{Nd}_9\text{Fe}_{86}\text{B}_5$ which had been high frequency induction melting and casting, and this mother material was placed in a stainless steel ball mill pot together with stainless steel balls using cyclohexane as a solvent, and amorphising treatment was conducted according to a ball mill method. Then,

a crystallizing process was conducted for given cycles to obtain an anisotropic exchange spring magnet powder. As shown in the enclosed Fig. 2, the exchange spring magnet produced by the method cited in the present claim has a crystal particle diameter of about 50nm.

Thus, the exchange spring magnet produced by the method of the present claims has a smaller diameter of a crystal particle than one produced by the method disclosed in Nomura et al. Thus, since the method of the present invention can produce an exchange spring magnet having a more microscopic diameter of a crystal particle in comparison with an exchange spring magnet produced using the method of Nomura et al, the exchange spring magnet of the present invention has excellent magnetic properties that enhance coercive force because of the realization of strong exchange interaction between crystal particles.

Thus, as evinced by the enclosed Figs. 1 and 2, an exchange spring magnet produced by the process recited in claim 1 is different from an exchange spring magnet produced by the process disclosed in Nomura et al. Therefore, the produced recited in claims is neither disclosed or suggested by Nomura et al.. Consequently, the allowance of claims is respectfully solicited.

CONCLUSION

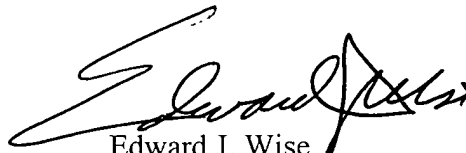
Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

09/893,892

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account and please credit any excess fees to such deposit account.

Respectfully submitted,

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